

# New Concepts for Highway Construction Projects

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When we develop new products and new techniques, we look at how we can do the best job possible. We look at the value engineering of the project and try to provide the best dollar value we can. Performance specifications are key to evaluating asphalt and any other highway material.

Highway construction can be viewed as a system of opposing forces. On one side is the consumer, the highway department having the specific project and desiring to build it at the lowest cost possible that will meet certain specifications. On the other side is the contractor who wants to do the job economically and maximize his profit. And it is only through profits that our company can spend money to develop new products and techniques.

There are two ways to sell a product. One is least cost, and one is performance, or quality. Although some work is concerned with low bid, particularly in government situations, the most economical buy is quality. The product with the lowest price is not always the best buy. In looking at products, you have to look at performance specifications or material specifications. Value engineering is key to long term performance, and it has little to do with price.

Even though a product meets a written specification, it may not perform in the way that the owner of the project intends. The performance of a product and the success of a project can only be assured when two things exist. First, the supplier or contractor must have knowledge of his products, be on the leading edge of technologies, have properly trained employees, and use state-of-the-art equipment. He must also be committed to excellence. Second, the purchaser must demand to buy the best products and technologies available. He must look beyond the material specifications to see that the supplier or contractor is competent and provides quality workmanship. For example, we have done this through guaranteeing and bonding our projects. We actually provide a maintenance bond for the work we do, guaranteeing the performance of the material for two years. In addition, we have an excellent quality control/quality assurance program that shows our commitment to stand behind everything we sell.

Cortland Asphalt has 12 locations, primarily in upstate New York, and is heavily involved in emulsion manufacturing. Cortland Asphalt operates two hot mix plants and two gravel operations. Nearly all liquid asphalt, surface treating, cold mix, and recycling work that we do is bid as a contractor, and we own many distributors and chip spreaders.

A successful project is made up of good specifications, good materials, good techniques and workmanship, and the willingness of a contractor to guarantee the job. At the same time, we must follow the guidelines of purchasing policies and bid procedures. It has been our experience that there are ways to guarantee work so that performance is considered, rather than the lowest price. In the future, we

have to look at new products and their best use in order to provide better value engineering.

Good materials begin in the laboratory. There is a tremendous need in the industry for the development of new materials. Many industries are very involved with their development. Good materials result from consistent processing, and the industry looks at good controls.

While quality control and quality assurance are very important, you cannot overlook good techniques and workmanship. We have developed a training program for all employees. We have produced videotapes that inform customers about our operations on specific types of jobs. We have published an asphalt emulsion handbook that addresses our products and processes, so that we have a standard for our work. We keep careful pre-job and project documentation, so that we can determine what went wrong if problems develop.

Over the years, we have been faced with a need to set a standard for the industry. We have been concerned with the alternatives to shoddy projects, such as losing a bid to another type of material or method outside the asphalt industry. Certainly there are people who look at the short-term results, the lowest bid, but we are pleased with the approach we have taken. The specifications we follow and the guarantee and maintenance bond we provide each customer has been very successful. Many local bids in our area now require a two-year maintenance bond covering material and workmanship.

The essence of the guarantee is that we are willing to stand behind whatever we do. This leading edge of service is very important, and value engineering is the direction of the entire industry. To move forward, the industry must continue to search for improved products and better techniques. When we are in a design/build mode, we make recommendations and then must be willing to stand behind them so that our customers can progress.